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NOTICE OF ALLOWANCE AND FEE(S) DUE

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7590

01/07/2011

Edwards Vacuum, Inc. 2041 MISSION COLLEGE BOULEVARD SUITE 260 SANTA CLARA, CA 95054 EXAMINER

YOUNG, NATASHA E

ART UNIT PAPER NUMBER

1774

DATE MAILED: 01/07/2011

1	APPLICATION NO. FILING DATE		FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
	10/567,817	02/08/2006	Jeremy Daniel McKendrick Watson	M01B128	4459	

TITLE OF INVENTION: PURIFIER

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	04/07/2011

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

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B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ar in m

appropriate. All further indicated unless correct maintenance fee notifica	correspondence includir ed below or directed oth	ng the Patent, advance on herwise in Block 1, by (a	rders and notification of ra) specifying a new corres	naintenance fees v	vill be and/o	mailed to the current r (b) indicating a sepa	correspondence address as rate "FEE ADDRESS" for	
CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address) 71134 7590 01/07/2011				Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.				
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SUITE 260	COLLEGE BOULE	EVARD	I he Stat addı tran	reby certify that thes Postal Service v	is Fee(e of Mailing or Transı s) Transmittal is being fficient postage for firs ISSUE FEE address (1) 273-2885, on the da	deposited with the United t class mail in an envelope above, or being facsimile atte indicated below.	
SANTA CLARA	A, CA 95054						(Depositor's name)	
							(Signature)	
			L				(Date)	
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTC	RNEY DOCKET NO.	CONFIRMATION NO.	
10/567,817	02/08/2006	Jeren	my Daniel McKendrick W	atson		M01B128	4459	
TITLE OF INVENTION	I: PURIFIER							
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APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	04/07/2011	
EXAM	IINER	ART UNIT	CLASS-SUBCLASS					
YOUNG, N.	ATASHA E	1774	422-169000					
1. Change of corresponde CFR 1.363).	ence address or indication	n of "Fee Address" (37	2. For printing on the p			1		
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	lication (or "Fee Address"							
PTO/SB/47; Rev 03-0 Number is required.	02 or more recent) attach	ed. Use of a Customer						
3. ASSIGNEE NAME A	ND RESIDENCE DATA	A TO BE PRINTED ON T	<u>I</u> ΓΗΕ PATENT (print or typ	pe)				
PLEASE NOTE: Unl	less an assignee is ident	ified below, no assignee	data will appear on the p T a substitute for filing an	atent. If an assign	ee is i	dentified below, the do	ocument has been filed for	
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Please check the appropr	iate assignee category or	categories (will not be pr	inted on the patent): \Box	Individual 🖵 Co	orporat	ion or other private gro	up entity 🚨 Government	
4a. The following fee(s)	are submitted:	41	o. Payment of Fee(s): (Ple a	se first reapply a	ıy pre	viously paid issue fee s	shown above)	
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☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			Payment by credit card. Form PTO-2038 is attached. The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).					
			overpayment, to Depo	sit Account Numb	er	(enclose ar	extra copy of this form).	
5. Change in Entity Sta	tus (from status indicated is SMALL ENTITY state	,	☐ b. Applicant is no lon	ger claiming SMA	I EN	TITY status See 37 CF	FR 1 27(g)(2)	
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This collection of inform	nation is required by 37 C	FR 1.311. The information	on is required to obtain or i	etain a benefit by t	he pub	lic which is to file (and	by the USPTO to process)	
an application. Confiden submitting the completed this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	tiality is governed by 35 d application form to the ions for reducing this but riginia 22313-1450. DO	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th ONOT SEND FEES OR	1.14. This collection is est depending upon the indivention of the complete that the control of the complete that the control of the complete that the control of	imated to take 12 idual case. Any corr, U.S. Patent and D THIS ADDRESS	minute ommen Trader S. SEN	s to complete, including ts on the amount of time mark Office, U.S. Depa D TO: Commissioner f	g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,	

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10/567,817	02/08/2006	Jeremy Daniel McKendrick Watson	M01B128	4459	
71134 7590 01/07/2011			EXAMINER		
Edwards Vacuum	n, Inc.	YOUNG, NATASHA E			
2041 MISSION COLLEGE BOULEVARD			ART UNIT	PAPER NUMBER	
SUITE 260 SANTA CLARA,	CA 95054		1774 DATE MAILED: 01/07/201	1	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 461 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 461 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)	
	10/567,817	WATSON ET AL.	
Notice of Allowability	Examiner	Art Unit	
	NATASHA YOUNG	1774	
The MAILING DATE of this communication apperall claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate communication. This application is suand MPEP 1308.	this application. If not included nication will be mailed in due course. THIS	ve
2. \(\times \) The allowed claim(s) is/are \(\frac{1 \text{ and } 3-23}{2} \).			
3. Acknowledgment is made of a claim for foreign priority una a) All b) Some* c) None of the: 1. Certified copies of the priority documents have 2. Certified copies of the priority documents have 3. Copies of the certified copies of the priority documents have International Bureau (PCT Rule 17.2(a)). * Certified copies not received: Applicant has THREE MONTHS FROM THE "MAILING DATE" on the delow. Failure to timely comply will result in ABANDONM THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. 4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submit	been received. been received in Application cuments have been received of this communication to file application.	n No in this national stage application from the a reply complying with the requirements	
INFORMAL PATENT APPLICATION (PTO-152) which give 5. CORRECTED DRAWINGS (as "replacement sheets") mus (a) including changes required by the Notice of Draftspers 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Paper No./Mail Date Paper No./Mail Date Identifying indicia such as the application number (see 37 CFR 1. each sheet. Replacement sheet(s) should be labeled as such in the deposation of the deposati	t be submitted. on's Patent Drawing Review s Amendment / Comment or 84(c)) should be written on the header according to 37 CFF	(PTO-948) attached In the Office action of Redrawings in the front (not the back) of 1.121(d). RIAL must be submitted. Note the	
Attachment(s) 1. ☐ Notice of References Cited (PTO-892) 2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948) 3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date 4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material	6. ☐ Interview Su Paper No./N 7. ☐ Examiner's A	ormal Patent Application mmary (PTO-413), Mail Date Amendment/Comment Statement of Reasons for Allowance .	

DETAILED ACTION

Allowable Subject Matter

Claims 1 and 3-23 are allowed.

The closest prior art references are Krueger et al (US 5,911,560), Goodell et al (US 4,942,019), della Porta et al (US 4,137,012), and Deninger et al (US 2002/0051712 A1).

The following is an examiner's statement of reasons for allowance:

Regarding claim 1, Goodell et al discloses a purifier for use in a gas processing application, comprising a chamber (C) having a gas inlet and a gas outlet (see figure 2) at least one baffle (24) arranged in the chamber, a source of the getter material within the chamber (25); and means for activating the source of the getter material (16) (see Abstract; figures 2-3; and column 2, line 49 through column 3, line 47).

della Porta et al discloses at least one baffle (strips, 46 and 48) having a coating comprising a getter material to react with species to be removed from a gas stream and form stable compounds and means for activating the source of the getter material to refresh the coating of getter material on the at least one baffles (see column 5, line 3 through column 6, line 8 and figures 4-6) but uses non-evaporable getter material such as titanium (see column 2, lines 48-59).

Deninger et al discloses the use of fresh and extremely pure metallic getter surface can be produced by evaporation or cathode sputtering in a vacuum or non-

evaporative getter (NEG) may be used (see paragraph 0102) and a gas purification unit wherein the titanium getter material is re-activated by the evaporation of fresh titanium (see paragraph 0104).

The prior art references do not disclose or suggest the combination of at least one baffle arranged in a chamber having a coating of getter material, a source of getter material in the chamber, and means for vaporizing the getter material to refresh the coating of getter material on the at least one baffle.

Claims 3-15 depend on claim 1.

Regarding claim 16, Krueger et al discloses **a semiconductor process system** (100) with getter assembly (202) with getter pumps (114, 116) with baffles (204) and a support element (210), which can further include a resistive element (212) (see figures 1-2; column 4, line 66 through column 5, line 18; and column 6, lines 15-43).

Goodell et al discloses a purifier for use in a gas processing application, comprising **a housing** (C) having a gas inlet and a gas outlet (see figure 2) **at least one baffle** (24) **arranged in the housing, a source of the getter material** (25); and means for activating the source of the getter material (16) (see Abstract; figures 2-3; and column 2, line 49 through column 3, line 47).

della Porta et al discloses at least one baffle (strips, 46 and 48) having a coating comprising a getter material to react with species to be removed from a gas stream and form stable compounds and means for activating the source of the getter material to refresh the coating of getter material on the at least one baffles (see column 5, line 3 through column 6, line 8 and figures 4-6) and a means for applying an electric potential

across the source of the getter material and the housing (see column 4, lines 50-59), which discloses that an electrical potential is produced within the vacuum vessel. della Porta et al discloses using non-evaporable getter material such as titanium (see column 2, lines 48-59).

Deninger et al discloses the use of fresh and extremely pure metallic getter surface can be produced by evaporation or cathode sputtering in a vacuum or non-evaporative getter (NEG) may be used (see paragraph 0102) and a gas purification unit wherein the titanium getter material is re-activated by the evaporation of fresh titanium (see paragraph 0104).

The prior art references do not disclose or suggest the combining of a process chamber having a purified gas inlet; a purifier comprising a gas outlet upstream of the purified gas inlet; at least one baffle arranged within the housing and comprising a getter material; a source of the getter material; and a means for applying an electric potential across the source of the getter material and the housing, thereby vaporizing the source of the getter material to refresh the coating of the getter material on the at least one baffle.

Claims 17-23 depend on claim 16.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATASHA YOUNG whose telephone number is 571-270-3163. The examiner can normally be reached on Mon-Thurs 7:30 am-6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Walter Griffin can be reached on 571-272-1447. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/N. Y./ Examiner, Art Unit 1774

/Walter D. Griffin/ Supervisory Patent Examiner, Art Unit 1774